

External Opportunities: Other Issues

Protecting Source Water
Financial Resources
Public Awareness

Source Water Protection

- Prevent Future Contamination
- Reduce Current Contamination

Elements of a Local Source Water Protection Program

- 1) Assess Source
- 2) Assemble Project Team
- 3) Choose Management Tools

1) Assess Source Water

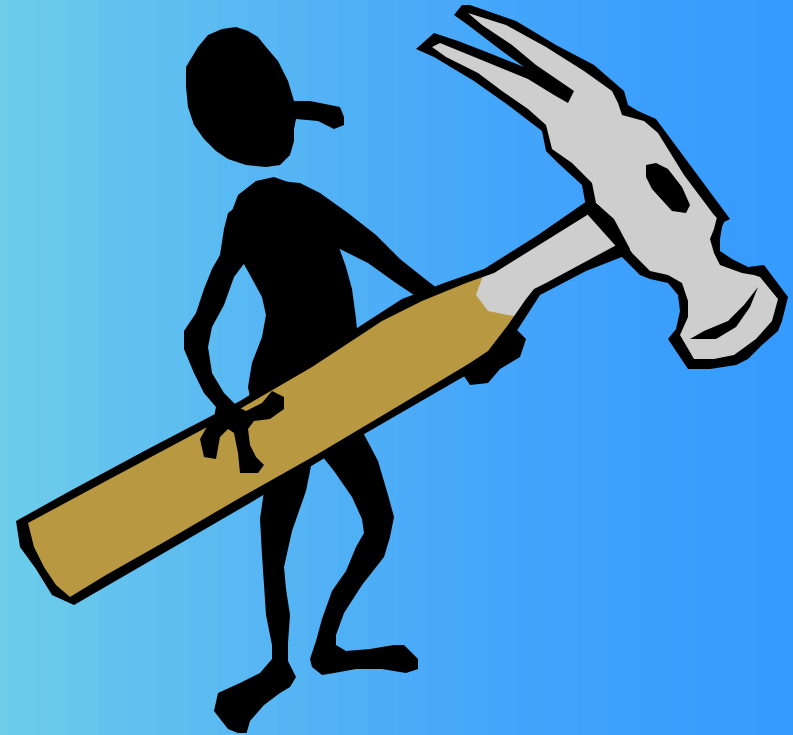
- System/Third-party Activities Can Build on the State Source Water Assessment
 - SWAP will delineate source water protection areas, identify sources of contamination, and analyze susceptibility
 - Gather additional information where necessary
 - Create map for use in management decisions (GIS)
 - Prioritize contamination threats
 - Update assessment (if not updated by state)

2) Assemble Local Project Team

- Assemble Committed Team to Guide Process
- Bring Together Appropriate Stakeholders
- Recruit Volunteers
- Establish Partnerships
 - Local authorities
 - Citizen groups
 - Neighboring communities
 - State regulators
 - Federal land management agencies
 - Businesses

3) Regulatory Management Tools

- Zoning Ordinances
(Prohibition of Various
Uses, or Permit
Conditions)
- Performance
Standards
- Health Regulations
(Septic Systems, Floor
Drains)



3) Non-Regulatory Management Tools

- Public Education
- Citizen Involvement
- Best Management Practices (BMPs)
- Land Acquisition and Protection
- Water Conservation

Assessing External Opportunities

Financial Resources

Assessment of Financial Options -- Implications

Assessing External Opportunities

Option	Cost	Financing Source	Rates
1			
2			
N			

Water Rates

- $\text{Rates} = f(\text{cost}, \text{cost allocation}, \text{rate design} \dots)$
- $\text{Cost} = f(\text{system organization}, \text{roles}, \text{technology} \dots)$
- Choosing Economically Efficient Solutions Will Lead to Lower Rates

Water System Cost Allocation and Rate Design

- Fixed Charge -Capital
- Variable Charge - O&M

Sustainable Pricing

Assessing External Opportunities

**Sustainable
Water Rate
(\$/unit)**

**Low enough to be
affordable for customers
so that the system can be
supported over time**

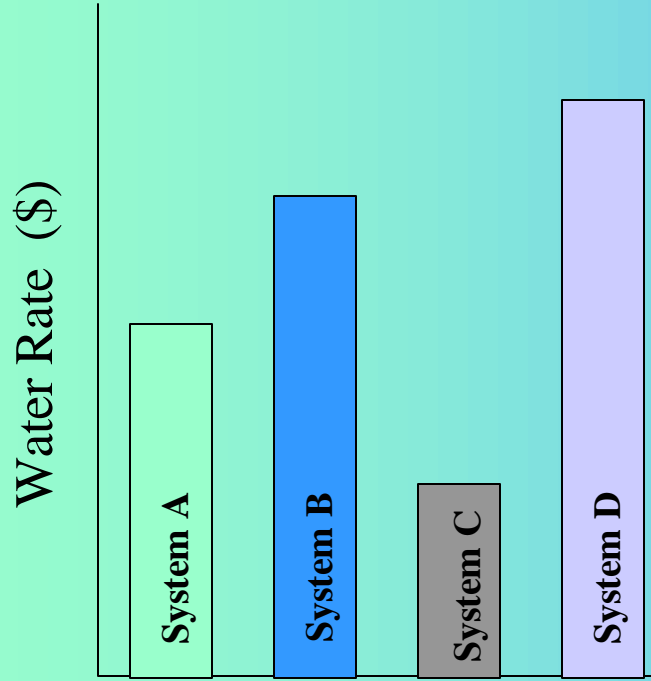


**High enough to cover the cost
of service and send efficient
price signals to guide
consumption and product
decisions**

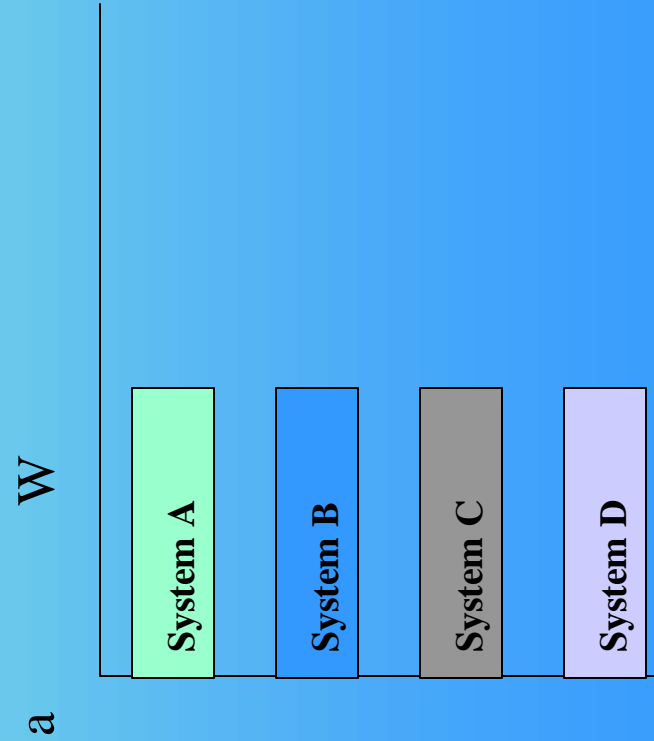
** Adapted from EPA, Sustainable Pricing: A Long Term Capacity Development Strategy*

Single-Tariff Pricing

Stand Alone Pricing



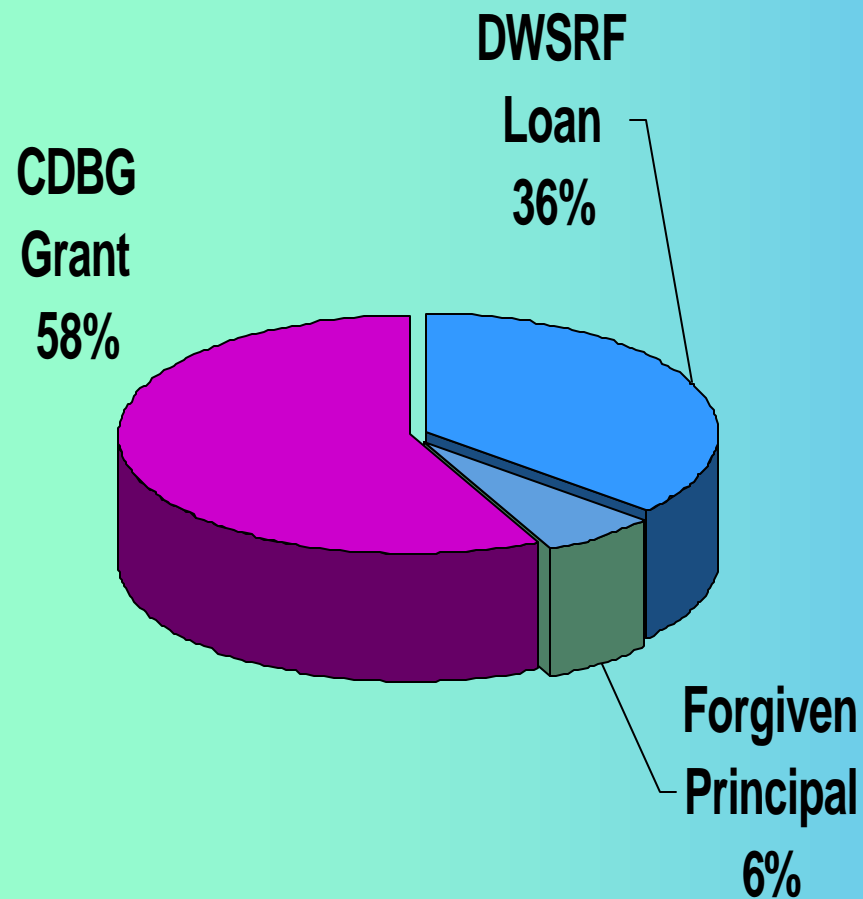
Single-Tariff Pricing



Major Funding Sources for Small Systems

- Grants
 - EPA Drinking Water State Revolving Fund (DWSRF) principal forgiveness
 - HUD Community Development Block Grant (CDBG) Program
 - USDA Rural Utilities Service (RUS) Water and Waste Disposal Program
- Loans
 - DWSRF
 - CoBank Rural Utility Banking Group
 - State Programs
 - Private Capital Markets
 - USDA Rural Utilities Service (RUS) Water and Waste Disposal Program

New Hampshire Case Study



- Town of Bristol
- 2,860 Served
- Disadvantaged
- Project to Install New Secondary Well
- Estimated Cost: \$358,000
- Total Funding: \$358,000

Public Awareness

Your Customers... Friends or Foes?

Interactions with the Public

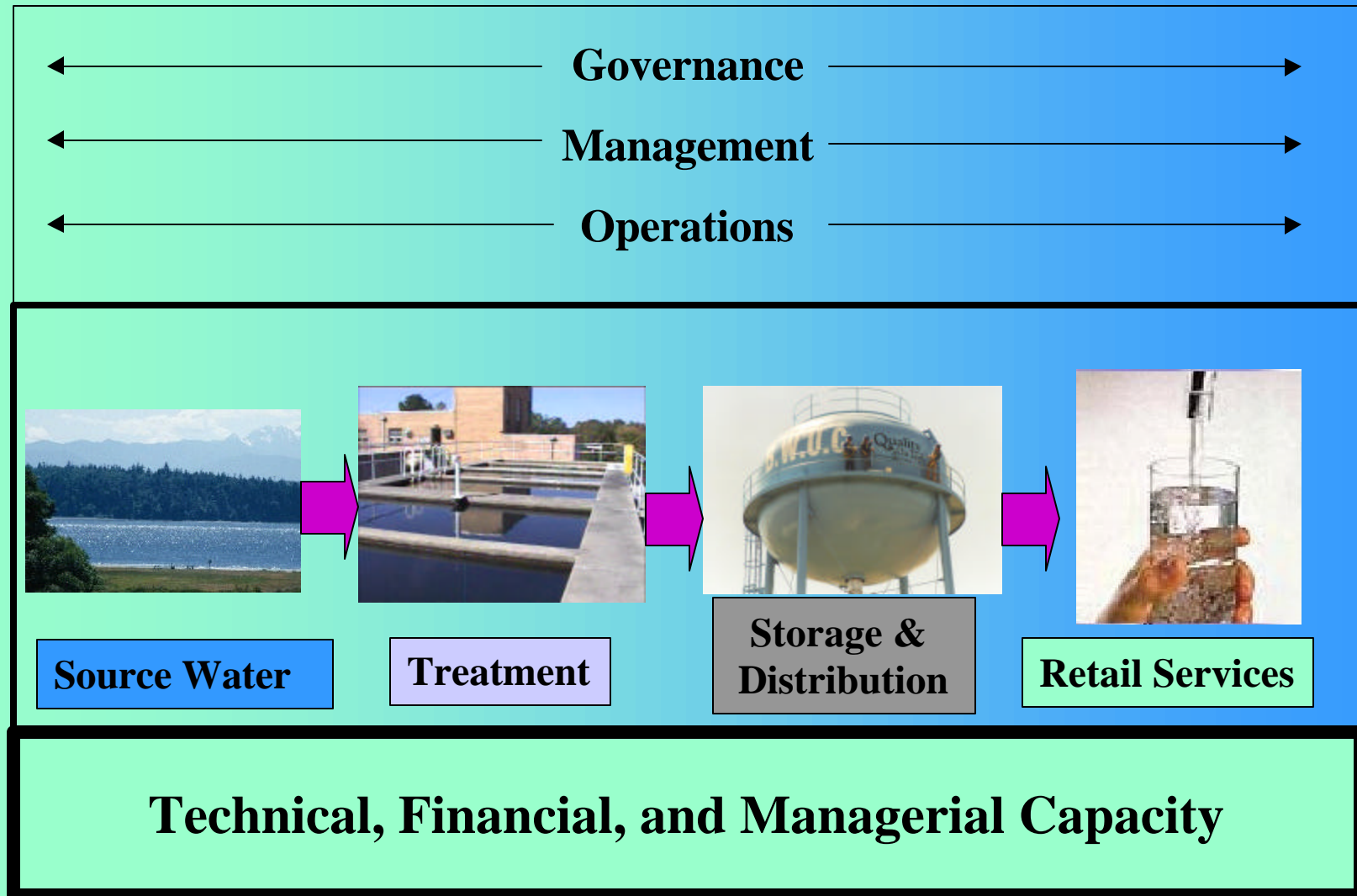
- Public Relations
- Public Education
- Public Involvement

As Part of Your Strategic Plan...

- What Specific Actions Will You Take to Maintain Public Support?

Strategic, Functional Water System Model

Assessing External Opportunities

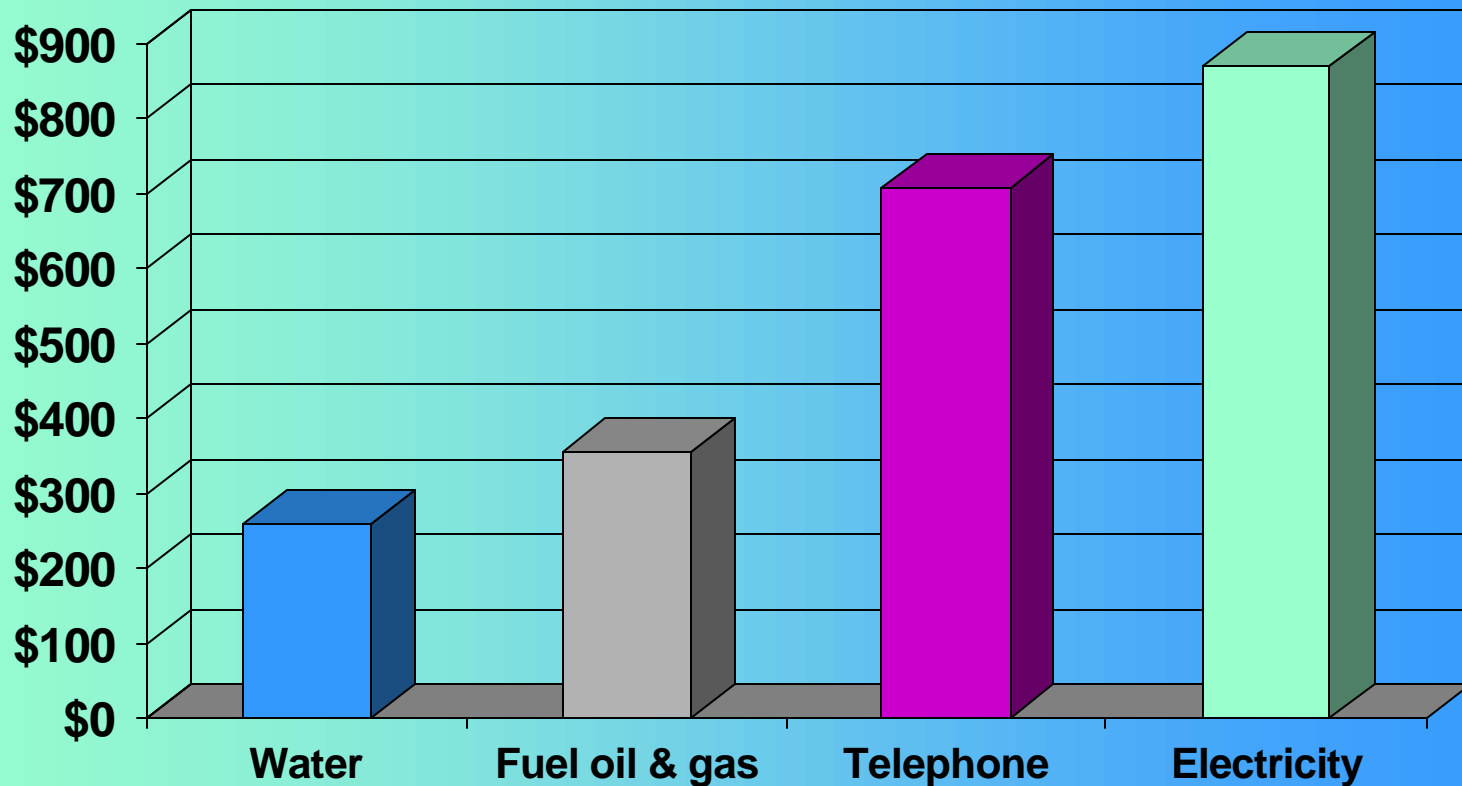


Assessing Interactions with the Public

Assessing External Opportunities

Utility Function	Steps to Build and Maintain Public Support
Source	
Treatment	
Storage & Distribution	
Retail Services	

Annual Household Expenditures for Utilities



Source: U.S. Bureau of Labor Statistics, *Consumer Expenditures in 1995*

Summary

- Getting the Public Involved can:
 - Increase public understanding of true cost and value of water
 - Increase customer willingness to pay and to act
 - Increase public support for changes in infrastructure and administration
 - Enhance water service through public involvement in decision-making, source water protection